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| L Number | Hits | Search Text | DB | Time stamp |
|----------|------|---|----------|------------------|
| 1 | 839 | oxo with (thiophen or thiophene) | USPAT; | 2003/09/12 11:11 |
| | | | US-PGPUB | |
| 2 | 813 | (oxo with (thiophen or thiophene)) and phenyl | USPAT; | 2003/09/12 11:12 |
| | | | US-PGPUB | |
| 3 | 102 | ((oxo with (thiophen or thiophene)) and phenyl) and spiro | USPAT; | 2003/09/12 11:12 |
| i | | | US-PGPUB | |

9AST 10/017, 695

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Welcome to STN International! Enter x:x
LOGINID:ssspta1202txn
PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2
                      Welcome to STN International
NEWS
                  Web Page URLs for STN Seminar Schedule - N. America
                  "Ask CAS" for self-help around the clock
NEWS
         Apr 08
NEWS
                  BEILSTEIN: Reload and Implementation of a New Subject Area
         Apr 09
NEWS
         Apr 09
                  ZDB will be removed from STN
      5
         Apr 19
                 US Patent Applications available in IFICDB, IFIPAT, and IFIUDB
NEWS
         Apr 22
NEWS
                 Records from IP.com available in CAPLUS, HCAPLUS, and ZCAPLUS
NEWS
         Apr 22
                 BIOSIS Gene Names now available in TOXCENTER
     8
NEWS
         Apr 22
                 Federal Research in Progress (FEDRIP) now available
NEWS
         Jun 03
                 New e-mail delivery for search results now available
NEWS 10
         Jun 10
                 MEDLINE Reload
                 PCTFULL has been reloaded
NEWS 11
         Jun 10
         Jul 02
NEWS 12
                 FOREGE no longer contains STANDARDS file segment
NEWS 13
         Jul 22
                 USAN to be reloaded July 28, 2002;
                  saved answer sets no longer valid
NEWS 14
         Jul 29
                 Enhanced polymer searching in REGISTRY
NEWS 15
         Jul 30
                 NETFIRST to be removed from STN
NEWS 16
         Aug 08
                 CANCERLIT reload
NEWS 17
         Aug 08
                 PHARMAMarketLetter(PHARMAML) - new on STN
NEWS 18
         Aug 08
                 NTIS has been reloaded and enhanced
NEWS 19
         Aug 19
                 Aquatic Toxicity Information Retrieval (AQUIRE)
                 now available on STN
NEWS 20
         Aug 19
                 IFIPAT, IFICDB, and IFIUDB have been reloaded
NEWS 21
         Aug 19
                 The MEDLINE file segment of TOXCENTER has been reloaded
NEWS 22
         Aug 26
                 Sequence searching in REGISTRY enhanced
NEWS 23
         Sep 03
                 JAPIO has been reloaded and enhanced
NEWS 24
         Sep 16
                 Experimental properties added to the REGISTRY file
                 CA Section Thesaurus available in CAPLUS and CA
NEWS 25
         Sep 16
NEWS 26
                 CASREACT Enriched with Reactions from 1907 to 1985
         Oct 01
NEWS 27
         Oct 21
                 EVENTLINE has been reloaded
NEWS 28
         Oct 24
                 BEILSTEIN adds new search fields
        Oct 24 Nutraceuticals International (NUTRACEUT) now available on STN
NEWS 29
NEWS 30 Oct 25
                 MEDLINE SDI run of October 8, 2002
NEWS 31 Nov 18
                 DKILIT has been renamed APOLLIT
NEWS 32 Nov 25
                 More calculated properties added to REGISTRY
NEWS 33 Dec 02
                 TIBKAT will be removed from STN
NEWS 34 Dec 04
                 CSA files on STN
                 PCTFULL now covers WP/PCT Applications from 1978 to date
NEWS 35
         Dec 17
NEWS 36
         Dec 17
                 TOXCENTER enhanced with additional content
NEWS 37
         Dec 17
                 Adis Clinical Trials Insight now available on STN
NEWS 38
         Dec 30
                 ISMEC no longer available
NEWS 39
         Jan 13
                 Indexing added to some pre-1967 records in CA/CAPLUS
NEWS 40
         Jan 21
                 NUTRACEUT offering one free connect hour in February 2003
NEWS 41
         Jan 21
                 PHARMAML offering one free connect hour in February 2003
NEWS 42
         Jan 29
                 Simultaneous left and right truncation added to COMPENDEX,
                 ENERGY, INSPEC
NEWS EXPRESS
              January 6 CURRENT WINDOWS VERSION IS V6.01a,
              CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),
              AND CURRENT DISCOVER FILE IS DATED 01 OCTOBER 2002
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              STN Operating Hours Plus Help Desk Availability
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NEWS PHONE Direct Dial and Telecommunication Network Access to STN

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FILE 'HOME' ENTERED AT 17:11:06 ON 09 FEB 2003

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SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

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STRUCTURE FILE UPDATES: 7 FEB 2003 HIGHEST RN 487578-67-6 DICTIONARY FILE UPDATES: 7 FEB 2003 HIGHEST RN 487578-67-6

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

Uploading 10017695.str

L1STRUCTURE UPLOADED

=> d l1 L1 HAS NO ANSWERS

L1 STR

G1 X, Ak

Structure attributes must be viewed using STN Express query preparation.

=> s 11

SAMPLE SEARCH INITIATED 17:11:38 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED - 10 TO ITERATE

100.0% PROCESSED 10 ITERATIONS 0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 11 TO 389
PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

=> s l1 ful

FULL SEARCH INITIATED 17:11:44 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 222 TO ITERATE

100.0% PROCESSED 222 ITERATIONS 1 ANSWERS

SEARCH TIME: 00.00.01

FULL ESTIMATED COST

L3 1 SEA SSS FUL L1

=> file marpat

COST IN U.S. DOLLARS SINCE FILE TOTAL

ENTRY SESSION 148.95 149.16

FILE 'MARPAT' ENTERED AT 17:12:51 ON 09 FEB 2003

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FILE CONTENT: 1988-PRESENT (VOL 104 ISS 15-VOL 138 ISS 6) (20030207/ED)

MOST RECENT CITATIONS FOR PATENTS FROM FIVE MAJOR ISSUING AGENCIES (COVERAGE TO THESE DATES IS NOT COMPLETE):

US 6506784 14 JAN 2003

DE 20211496 09 JAN 2003

EP 1276165 15 JAN 2003

JP 2003013033 15 JAN 2003

WO 2003003393 09 JAN 2003

Structure search limits have been raised. See HELP SLIMIT for the new, higher limits.

=> s 13 ful

FULL SEARCH INITIATED 17:13:02 FILE 'MARPAT'

FULL SCREEN SEARCH COMPLETED - 617 TO ITERATE

100.0% PROCESSED 617 ITERATIONS 17 ANSWERS

SEARCH TIME: 00.00.11

17 SEA SSS FUL L1 L4

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 54.05 203.21

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 17:13:19 ON 09 FEB 2003 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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FILE COVERS 1907 - 9 Feb 2003 VOL 138 ISS 7 FILE LAST UPDATED: 7 Feb 2003 (20030207/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 14

L5 17 L4

=> d l5 1- ibib abs hitstr YOU HAVE REQUESTED DATA FROM 17 ANSWERS - CONTINUE? Y/(N):Y

ANSWER 1 OF 17 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:928248 CAPLUS DOCUMENT NUMBER: 138:14003

TITLE: Preparation of arylfuranones and related compounds as

cyclooxygenase-2 inhibitors

INVENTOR(S): Garvey, David S.; Schroeder, Joseph D.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 42 pp.

CODEN: USXXCO

DOCUMENT TYPE: LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE 2005 APPLICATION NO. DATE US 2002183366 A1 20021205 US 2002-102865 2002022 US 2001-277950P P 20010323 PRIORITY APPLN. INFO.:

OTHER SOURCE(S): MARPAT 138:14003

GΙ

$$z^1$$
 y^1
 x^2
 x^2

AB Title compds. [I; X1Y1Z1 = CR4R5CR5R51CR4R5, COCR4R41CR5R51,
 CR4R41CR5R51CO, [CR5(R51)]kOC(O), C(O)O[CR5R51]k, CR4R41NR3CR5R51,
 CR5R51NR3CO, CR4:CR41S, SCR4CR41, SN:CR4, CR4:NS, N:CR4O, OCR4:N,
 NR3CR4:N, N:CR4S, SCR4:N, CONR3CR51R51, R3NCR5:CR51, CR4:CR5NR3, ON:CR4,
 CR4:NO; NNS, SN:N; R3NCR4:N, N:CR4NR3, R3NN:N, N:NNR3, CR4R41OCR5R51,
 CR4R41SCR5R51, CR4R41COCR5R51, CR4R41CR5R51CS, [CR5R51]kOC(S),
 C(S)O[CR5R51]k, etc.; R1 = SO2C(XRjRk), S(O)C(XRjRk); R11 = H, halo, Me,
 CH2OH; R2 = alkyl, cycloalkyl, substituted Ph, naphthyl, heteroaryl, etc.;
 R3 = H, haloalkyl, cyano, alkyl, etc.; R4, R41, R5, R51 = H, amino, cyano,
 alkyl, haloalkyl, alkoxy, alkylthio, etc.; j = 0-3; k = 1, 2], were prepd.
 Thus, 4-(4-methylthiophenyl)-3-phenyl-1,5-dihydrofuran-2-one, antimony
 chloride, and Deoxy-Fluor were stirred in CH2Cl2 for 12 h. MCPBA was
 added followed by 4 h stirring to give 8% 4-[4 [fluoromethylsulfonyl]phenyl]-3-phenyl-1,5-dihydrofuran-2-one. The latter
 inhibited COX-2 by 40% at 10 .mu.M.

L5 ANSWER 2 OF 17 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

2001:472491 CAPLUS

DOCUMENT NUMBER:

135:76524

TITLE:

Preparation of nitrosated and nitrosylated

cyclooxygenase-2 inhibitors

INVENTOR (S):

Bandarage, Ramani R.; Bandarage, Upul K.; Fang,

Xinqin; Garvey, David S.; Letts, L. Gordon; Schroeder,

Joseph D.; Tam, Sang William

PATENT ASSIGNEE(S):

SOURCE:

Nitromed, Inc., USA PCT Int. Appl., 230 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

```
PATENT NO.
                                        KIND DATE
                                                                                APPLICATION NO. DATE
         WO 2001045703
                                        A1
                                                    20010628
                                                                              WO 2000-US35014 20001222
                W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
                W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
         US 2001041726
                                                    20011115
                                                                            US 2000-741816 20001222
                                         A1
         EP 1246621
                                                                                                                20001222
                                          A1
                                                    20021009
                                                                              EP 2000-989422
                        AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
                        IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
PRIORITY APPLN. INFO.:
                                                                          US 1999-171623P P 19991223
                                                                          US 2000-226085P P
                                                                                                                20000818
                                                                           WO 2000-US35014 W 20001222
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OTHER SOURCE(S):

MARPAT 135:76524

GI

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\$$

Title compds. were prepd. Thus, MeCOCH: CH2 was condensed with AB 4-(MeS)C6H4CHO and the oxidized product cyclocondensed with Me2C(SH)CH2NH2 to give, after Me3CONO treatment, title compd. I. Data for biol. activity of title compds. were given.

REFERENCE COUNT:

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 3 OF 17 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

2001:75245 CAPLUS

DOCUMENT NUMBER:

134:147400

TITLE:

Preparation of biphenyl-substituted cyclic ketoenol

derivatives as herbicides and pesticides

INVENTOR(S):

Fischer, Reiner; Graff, Alan; Bretschneider, Thomas;

Erdelen, Christoph; Drewes, Mark Wilhelm; Feucht,

Dieter

Ι

PATENT ASSIGNEE(S):

Bayer A.-G., Germany Ger. Offen., 68 pp.

SOURCE:

CODEN: GWXXBX

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PA | TENT | NO. | | KI | ND | DATE | | | A | PPLI | CATI | и ис | ο. | DATE | | | |
|-------|-------------|------|-------|-----|-----|-------|--------------|-----|-------|-------|-------|------|-----|-------|------|-----|-----|
| | | | | | | | - | | - | | | | | | | | |
| DE | 1993 | 5963 | | A | 1 | 2001 | 0201 | | D: | E 19 | 99-1 | 9935 | 963 | 1999 | 0730 | | |
| WO | 2001 | 0090 | 92 | A | 1 | 2001 | 0208 | | W | 20 | 00-E | P685 | 2 | 2000 | 0718 | | |
| | W: | ΑE, | AG, | AL, | AM, | ΑT, | AU, | ΑZ, | BA, | BB, | BG, | BR, | BY, | ΒZ, | CA, | CH, | CN, |
| | | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EE, | ES, | FI, | GB, | GD, | GE, | GH, | GM, | HR, |
| | | HU, | ID, | IL, | IN, | IS, | JP, | KΕ, | KG, | ΚP, | KR, | KΖ, | LC, | LK, | LR, | LS, | LT, |
| | | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW, | MX, | ΜZ, | NO, | NZ, | PL, | PT, | RO, | RU, |
| | | SD, | SE, | SG, | SI, | SK, | SL, | ТJ, | TM, | TR, | TT, | TZ, | UA, | ŪĠ, | US, | UΖ, | VN, |
| | | YU, | ZA, | ZW, | AM, | ΑZ, | BY, | KG, | KZ, | MD, | RU, | ТJ, | TM | | | | |
| | RW: | GH, | GM, | KΕ, | LS, | MW, | MZ, | SD, | SL, | SZ, | TZ, | UG, | ZW, | ΑT, | BE, | CH, | CY, |
| | | DE, | DK, | ES, | FI, | FR, | GB, | GR, | ΙE, | IT, | LU, | MC, | NL, | PT, | SE, | BF, | ВJ, |
| | | | CG, | | | | | | | | | | | | | | |
| BR | 2000 | 0128 | 77 | Α | | 2002 | 0409 | | BI | R 20 | 00-12 | 2877 | | 20000 | 718 | | |
| ΕP | 1204 | 638 | | A: | 1 | 20020 | 0515 | | El | P 200 | 00-94 | 1937 | 1 | 20000 | 718 | | |
| | R: | ΑT, | ΒE, | CH, | DE, | DK, | ES, | FR, | GB, | GR, | IT, | LI, | LU, | NL, | SE, | MC, | PT, |
| | | | SI, | | | | | | | | | | | | | | |
| ORITY | APP | LN. | INFO. | . : | | | | I | DE 19 | 999-: | 1993 | 5963 | Α | 19990 | 730 | | |
| | | | | | | | | V | NO 20 | 000-1 | EP685 | 52 | W | 20000 | 718 | | |

PRIO

OTHER SOURCE(S):

MARPAT 134:147400

GI

Title compds., e.g., cyclic enol ether I, were prepd. Data for biol. AΒ activity of title compds. were given.

ANSWER 4 OF 17 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

2000:607400 CAPLUS

Ι

DOCUMENT NUMBER:

133:193062

TITLE:

Preparation of 2-aryl-4-hydroxy-2,5-dihydro-2-

furanones and analogs

INVENTOR (S):

Lieb, Folker; Fischer, Reiner; Graff, Alan

PATENT ASSIGNEE(S):

Bayer A.-G., Germany

SOURCE:

Ger. Offen., 8 pp. CODEN: GWXXBX

20000831

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.

KIND DATE

A1

APPLICATION NO. DATE

_ _ _ _

DE 19908699 PRIORITY APPLN. INFO.:

DE 1999-19908699 19990226 DE 1999-19908699

19990226

OTHER SOURCE(S):

CASREACT 133:193062; MARPAT 133:193062

GI

Title compds. [I; R = (un)substituted Ph; R1 = H, (un)substituted (cyclo)alkyl, -(hetero)aryl; R2 = CR3:CHR4; R3 = H, halo, (un)substituted cycloalkyl; R4 = H or (un)substituted alkyl; R1R4,R3R4 = atoms to complete a ring; Z = O, S, [(ar)alkyl]imino] were prepd. by cyclocondensation of RC(COCl):C:O with R1C(:Z)CHR3CH2R4. Thus, 2,4,6trimethylphenylchlorocarbonylketene was refluxed 8h with Me cyclopentyl ketone to give 60% I (R = 2,4,6-trimethylphenyl, R1 = Me, R2 =1-cyclopentenyl).

ANSWER 5 OF 17 CAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 1999:708738 CAPLUS

DOCUMENT NUMBER:

TITLE:

131:310546

Arylphenyl-substituted cyclic keto enols as

insecticides and acaricides

INVENTOR(S):

Lieb, Folker; Fischer, Reiner; Graff, Alan; Schneider,

Udo; Bretschneider, Thomas; Erdelen, Christoph; Andersch, Wolfram; Drewes, Mark Wilhelm; Dollinger, Markus; Wetcholowsky, Ingo; Feucht, Dieter; Pontzen,

Rolf; Myers, Randy Allen

PATENT ASSIGNEE(S): Bayer A.-G., Germany SOURCE: PCT Int. Appl., 245 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent German

LANGUAGE:

GI

_ ___

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| | PATENT NO. KI | | | | | DATE APPLICATION NO. DATE | | | | | | | | | | | |
|---------|---------------|------|----------|-----|-----|---------------------------|-------|------|------|------|------|------|-----|------|-----------|-----|-----|
| | | | - | | | | | | - | | | | | | - | | |
| WO | 9955 | 673 | | A. | 1 | 1999: | 1104 | | W | 0 19 | 99-E | P248 | 8 | 1999 | 0414 | | |
| | W: | ΑE, | AL, | AM, | ΑT, | ΑU, | ΑZ, | BA, | BB, | ВG, | BR, | BY, | CA, | CH, | CN, | CU, | CZ, |
| | | DE, | DK, | EE, | ES, | FI, | GB, | GD, | GE, | GH, | GM, | HR, | HU, | ID, | IL, | IN, | IS, |
| | | JP, | KΕ, | KG, | ΚP, | KR, | ΚZ, | LC, | LK, | LR, | LS, | LT, | LU, | LV, | MD, | MG, | MK, |
| | | MN, | MW, | MX, | NO, | NZ, | PL, | PT, | RO, | RU, | SD, | SE, | SG, | SI, | SK, | SL, | ТJ, |
| | | TM, | TR, | TT, | UA, | UG, | US, | UZ, | VN, | YU, | ZA, | ZW, | AM, | AZ, | BY, | KG, | KZ, |
| | | MD, | RU, | TJ, | TM | | | | | | | | | | · | | · |
| | RW: | GH, | GM, | KE, | LS, | MW, | SD, | SL, | SZ, | UG, | ZW, | ΑT, | BE, | CH, | CY, | DE, | DK, |
| | | | | | | | | | | | | | | BF, | | | |
| | | CI, | CM, | GΑ, | GN, | GW, | ML, | MR, | NE, | SN, | TD, | TG | | | , | | • |
| DE | 1981 | 8732 | • | À | 1 | 1999: | 1028 | · | Ď | E 19 | 98-1 | 9818 | 732 | 1998 | 0427 | | |
| | 9934 | | | | | | | | | | | | | | | | |
| | 9910 | | | | | | | | | | | | | | | | |
| EP | 1075 | 465 | | A. | 1 | 2001 | 0214 | | E | P 19 | 99-9 | 1575 | 9 | 1999 | 0414 | | |
| | R: | FR | | | | | | | | | | | | | | | |
| JP | 2002 | 5130 | 02 | T | 2 | 2002 | 0508 | | J | P 20 | 00-5 | 4583 | 3 | 1999 | 0414 | | |
| | 6451 | | | | | | | | | | | | | | | | |
| PRIORIT | Y APP | LN. | INFO | . : | | | |] | DE 1 | 998- | 1981 | 8732 | Α | 1998 | 0427 | | |
| | | | | | | | | 1 | WO 1 | 999- | EP24 | 88 | W | 1999 | 0414 | | |
| OTHER S | OURCE | (S): | | | MAR | PAT : | 131:3 | 3105 | 46 | | | | | | | | |

$$R^{O}$$
 R^{2}
 R^{1}
 R^{3}

AB Title compds. were prepd. for use as insecticides and acaricides. Thus, pyrrolinone I [R = Me, R1 = 4-ClC6H4, R2 = Me, R3 = Cl] was prepd. by treating I [R1 = Br] with 4-ClC6H4B(OH)2. I [R = OEt, R1 = 4-ClC6H4, R2 = Cl, R3 = Me] at 1% gave 90% kill of Phaedon cochleariae and at 0.1% gave 95% kill of Tetranychus urticae.

REFERENCE COUNT:

11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 6 OF 17 CAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 1999:626173 CAPLUS

DOCUMENT NUMBER: 131:243180

TITLE: Preparation of arylketoenols as pesticides and

herbicides.

INVENTOR(S): Lieb, Folker; Fischer, Reiner; Graff, Alan; Schneider,

Udo; Bretschneider, Thomas; Erdelen, Christoph; Andersch, Wolfram; Drewes, Mark Wilhelm; Dollinger, Markus; Wetcholowsky, Ingo; Myers, Randy Allen PATENT ASSIGNEE(S):

Bayer Aktiengesellschaft, Germany

SOURCE:

PCT Int. Appl., 267 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent German

LANGUAGE:

Gei

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PATENT NO. | KIND DATE | APPLICATION NO. DATE |
|--------------------|-------------------|--|
| | | |
| WO 9948869 | Al 1999093 | 30 WO 1999-EP1787 19990318 |
| W: AE, A | L, AM, AT, AU, AZ | Z, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, |
| DE, D | K, EE, ES, FI, GE | B, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, |
| JP, K | E, KG, KP, KR, KZ | Z, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, |
| MN, M | W, MX, NO, NZ, PL | L, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, |
| TM, T | R, TT, UA, UG, US | S, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, |
| MD, R | U, TJ, TM | |
| RW: GH, G | M, KE, LS, MW, SD | O, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, |
| ES, F | I, FR, GB, GR, IE | E, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, |
| CI, C | M, GA, GN, GW, ML | L, MR, NE, SN, TD, TG |
| DE 19813354 | A1 1999093 | DE 1998-19813354 19980326 |
| CA 2325526 | AA 1999093 | 30 CA 1999-2325526 19990318 |
| AU 9934147 | A1 1999101 | L8 AU 1999-34147 19990318 |
| AU 751256 | B2 2002080 |)8 |
| BR 9909143 | A 2000120 | D5 BR 1999-9143 19990318 |
| EP 1066258 | A1 2001011 | LO EP 1999-915653 19990318 |
| R: AT, B | E, CH, DE, DK, ES | S, FR, GB, IT, LI, NL |
| JP 2002507599 | T2 2002031 | L2 JP 2000-537852 19990318 |
| US 6458965 | B1 2002100 | 01 US 2001-646722 20010102 |
| PRIORITY APPLN. IN | FO.: | DE 1998-19813354 A 19980326 |
| | | WO 1999-EP1787 W 19990318 |
| OTHER SOURCE(S): | MARPAT 131 | 1:243180 |

Ι

GI

AB Title compds. [I; X = halo, alkyl, alkoxy, alkenyloxy, alkylthio, alkylsulfinyl, alkylsulfonyl, haloalkyl, haloalkoxy, haloalkenyloxy, NO2, cyano, (substituted) Ph, PhO, PhS, phenylalkoxy, phenylalkylthio; Z = (substituted) cycloalkyl, aryl, heteroaryl; W, Z = H, halo, alkyl, alkoxy, alkenyloxy, haloalkyl, haloalkoxy, haloalkenyloxy, NO2, cyano; E = specified (substituted) dioxopyrrolyl, dioxofuryl, dioxothienyl, dioxopyrazolyl, dioxopyranyl, dioxocyclopentyl, etc., residues], were prepd. Thus, II (Q = Br) was stirred with 4-trifluoromethoxyphenylboronic acid, Pd(PPh3)4, and Na2CO3 in dimethoxyethane/H2O at 80.degree. to give II (Q = 4-C6H4OCF3). I at 0.1% gave 95-100% kill of Myzus persicae on cabbage leaves.

REFERENCE COUNT:

11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 7 OF 17 CAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 1999:566021 CAPLUS

DOCUMENT NUMBER:

131:199616

TITLE:

Preparation of cyclic ketoenols as herbicides and

pesticides

INVENTOR(S):

Lieb, Folker; Fischer, Reiner; Graff, Alan; Schneider,

Udo; Bretschneider, Thomas; Erdelen, Christoph; Andersch, Wolfram; Drewes, Mark-Wilhelm; Dollinger,

Markus; Wetcholowsky, Ingo; Myers, Randy Allen

Bayer Aktiengesellschaft, Germany

PATENT ASSIGNEE(S): SOURCE:

PCT Int. Appl., 264 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT:

: 1

PATENT INFORMATION:

| P | PATENT NO. KIND DATE | | | | | | | | | | | | Э. | DATE | | | |
|--------|----------------------|------|------|-----|-----|------|------|-----|------|------|----------|-------|-------|-------|------|-----|-----|
| W | 9943 | | | | | | | | | | 99-E | | 9 | 1999 | 0217 | | |
| | W: | AL, | AM, | AT, | AU, | ΑZ, | BA, | BB, | BG, | BR, | BY, | CA, | CH, | CN, | CU, | CZ, | DE, |
| | | DK, | EE, | ES, | FI, | GB, | GD, | GE, | GH, | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JP, |
| | | KE, | KG, | ΚP, | KR, | ΚZ, | LC, | LK, | LR, | LS, | LT, | LU, | LV, | MD, | MG, | MK, | MN, |
| | | MW, | MX, | NO, | NZ, | PL, | PT, | RO, | RU, | SD, | SE, | SG, | SI, | SK, | SL, | ТJ, | TM, |
| | | TR, | TT, | UA, | UG, | US, | UΖ, | VN, | YU, | ZW, | AM, | ΑZ, | BY, | KG, | ΚZ, | MD, | RU, |
| | | TJ, | TM | | | | | | | | | | | | | | |
| | RW: | GH, | GM, | KE, | LS, | MW, | SD, | SZ, | UG, | ZW, | ΑT, | BE, | CH, | CY, | DE, | DK, | ES, |
| | | FI, | FR, | GB, | GR, | ΙE, | IT, | LU, | MC, | NL, | PT, | SE, | BF, | ВJ, | CF, | CG, | CI, |
| | | CM, | GΑ, | GN, | GW, | ML, | MR, | ΝE, | SN, | TD, | TG | | | | | | |
| DI | E 1980 | 8261 | | A | 1 | 1999 | 1028 | | D | E 19 | 98-1 | 9808: | 261 | 1998 | 0227 | | |
| CZ | A 2322 | 158 | | A | A. | 1999 | 0902 | | C | A 19 | 99-2 | 3221 | 58 | 1999 | 0217 | | |
| | J 9925 | | | | | | | | A | U 19 | 99-2 | 5231 | | 1999 | 0217 | | |
| ΑU | J 7497 | 86 | | B: | 2 | 2002 | 0704 | | | | | | | | | | |
| BI | R 9909 | 243 | | Α | | 2000 | 1114 | | В | R 19 | 99-92 | 243 | | 1999 | 0217 | | |
| EI | 2 1056 | 717 | | A: | 1 : | 2000 | 1206 | | Ē | P 19 | 99-90 | 0488 | 1 | 1999 | 0217 | | |
| | R: | ΑT, | BE, | CH, | DE, | DK, | ES, | FR, | GB, | IT, | LI, | NL | | | | | |
| | 2002 | | | | | | | | | | | | | 1999 | 0217 | | |
| | 9901 | | | | | | | | | | | | | 1999 | | | |
| US | 6417 6 2002 | 370 | | _ B | 1 : | 2002 | 0709 | | U. | S 20 | 00-62 | 2301 | 5 | 2000 | 1023 | | |
| | | | | | | | | | U. | S 20 | 02-13 | 37763 | 3 | 20020 | 0502 | | |
| PRIORI | ry app | LN. | INFO | . : | | | | Ι | DE 1 | 998- | 1980 | 8261 | Α | 19980 | 0227 | | |
| | | | | | | | | V | VO 1 | 999- | EP102 | 29 | W | 1999 | 0217 | | |
| | | | | | | | | τ | JS 2 | 000- | 6230 | 16 | A3 | 2000 | 1023 | | |

MARPAT 131:199616

$$R^2$$
 R^3
 R

OTHER SOURCE(S):

GI

II

Title compds. [I; R = enolic oxo(hetero)cyclic group, e.g., oxopyrrolinyl group II; A = H, (halo)alk(en)yl, (hetero)aryl, etc.; B = H or (alkoxy)alkyl; AB = atoms to complete a ring; D = H, alk(en)yl, (hetero)aryl, etc.; AD = atoms to complete a ring; G = H or acyl; R1 = halo, alkyl, alkoxy, phenyl(oxy), etc.; R2 = (un)substituted cycloalkyl or - (hetero)aryl; R3 = H, halo, alkyl, alkoxy, etc.] were prepd. Thus, I (R = group II, A = CHMe2, B = R1 = Me, D = G = H, R2 = Et)(III; R2 = Br) was condensed with 4-ClC6H4B(OH)2 to give III (R2 = C6H4Cl-4). Data for biol.

activity of I were given.

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 8 OF 17 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1999:260034 CAPLUS

DOCUMENT NUMBER: 130:296553

TITLE: Preparation of analogs of strobilurine as agrochemical

fungicides.

INVENTOR(S): Filippini, Lucio; Venturini, Isabella; Colombo, Laura;

Mirenna, Luigi

PATENT ASSIGNEE(S): Isagro Ricerca S.r.l., Italy

SOURCE: Eur. Pat. Appl., 24 pp.

CODEN: EPXXDW DOCUMENT TYPE: Patent

LANGUAGE: Patent English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND DA | TE A | PPLICATION NO. | DATE |
|---------------------|--------------|----------------|-----------------|-----------------|
| | | | | |
| EP 909760 | A1 19 | 990421 EI | P 1998-203490 | 19981016 |
| EP 909760 | B1 20 | 011212 | | |
| R: AT, BE | , CH, DE, Di | K, ES, FR, GB, | GR, IT, LI, LU, | NL, SE, MC, PT, |
| IE, SI | , LT, LV, F | I, RO | | |
| AT 210667 | E 200 | 011215 A | Г 1998-203490 | 19981016 |
| ES 2169475 | T3 200 | 020701 ES | 5 1998-203490 | 19981016 |
| JP 11193288 | A2 19 | 990721 JI | P 1998-297339 | 19981019 |
| US 5994380 | A 199 | 991130 US | 5 1998-174451 | 19981019 |
| PRIORITY APPLN. INF | 0.: | IT 19 | 997-MI2347 A | 19971017 |
| OTHER SOURCE(S): | MARPA' | T 130:296553 | | |
| GI | | | | |

$$R^9$$
 R^7
 T
 R^{10}
 R^6
 R^6
 R^7
 R^6
 R^6

Me
$$N \rightarrow N$$
 $N \rightarrow N$ $Me \rightarrow N$ $Me \rightarrow N$ $Me \rightarrow N$ $Me \rightarrow N$

AB Title compds. [I; R4, R5, R6 = H, alkyl, haloalkyl, alkoxy, haloalkoxy, thioalkyl, amino, cycloalkyl, heterocyclyl, alkoxycarbonyl, carbamoyl, PH, naphthyl, PhO, naphthyloxy, etc.; K = N, CR12; R7-R12 = H, alkyl, alkoxy, thioalkyl, cycloalkyl, alkoxycarbonyl, Ph, cyano, halo, etc.; adjacent

pairs of Rd-Rg = CH:CHCH:CH; T = R2YCH:CDOXR1, R2YN:CCOXR1, etc.; X, Y = O, S, NR3, bond; R1 = H, alkyl, haloalkyl, alkoxy, haloalkoxy, etc.; R2 = H, alkyl, haloalkyl; R3 = H, alkyl, haloalkyl; with provisos], were prepd. Thus, 2-BrCH2C6H4C(:NOMe)CO2Me was stirred with K2CO3 in DMF;

6-acetylthiazolo[3,2-b][1,2,4]triazole oxime in DMF was added and the mixt. was kept 24 h to give title compd. (II). All I at 500 ppm gave >90% control of Sphaerotheca fuliginea on cucumber leaves.

REFERENCE COUNT:

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 9 OF 17 CAPLUS COPYRIGHT 2003 ACS

3

ACCESSION NUMBER:

1997:780649 CAPLUS

DOCUMENT NUMBER:

128:48214

TITLE:

Preparation of 3,5-diphenyl-2(5H)-furanone derivatives

as nonpeptide endothelin I antagonists

INVENTOR(S):

Berryman, Kent Alan; Doherty, Annette Marian; Edmunds,

Jeremy John; Patt, William Chester; Plummer, Mark

Stephen; Repine, Joseph Thomas

PATENT ASSIGNEE(S):

Warner-Lambert Co., USA

SOURCE:

U.S., 120 pp., Cont.-in-part of U.S. Ser. No. 278,882,

abandoned.

CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-----------------|--------|----------|-----------------|--------------|
| | | | | - |
| US 5691373 | A | 19971125 | US 1995-384083 | 19950206 |
| CA 2165567 | AA | 19950223 | CA 1994-2165567 | 19940809 |
| HU 74179 | A2 | 19961128 | HU 1996-365 | 19940809 |
| ZA 9406265 | Α | 19960219 | ZA 1994-6265 | 19940818 |
| US 6017916 | Α | 20000125 | US 1997-787423 | 19970122 |
| PRIORITY APPLN. | INFO.: | | US 1993-109751 | 19930819 |
| | | | US 1994-217578 | 19940324 |
| | | | US 1994-278882 | 19940726 |
| | | | US 1995-384083 | 19950206 |

OTHER SOURCE(S):

MARPAT 128:48214

GΙ

$$\mathbb{R}^3$$
 \mathbb{R}^4
 \mathbb{R}^4
 \mathbb{R}^1
 \mathbb{R}^4
 \mathbb{R}^0
 \mathbb{R}^0
 \mathbb{R}^0
 \mathbb{R}^0
 \mathbb{R}^0
 \mathbb{R}^0
 \mathbb{R}^0
 \mathbb{R}^0
 \mathbb{R}^0

AB Novel nonpeptide antagonists of endothelin I represented by formula [I; R1 = (un) substituted C3-12 cycloalkyl, Ph substituted with 1-5 substituents, naphthyl or heteroaryl optionally substituted with 1-5 substituents; R2 = C1-12 linear or branched alkyl, C3-12 linear or branched cycloalkyl, aryl optionally substituted with 1-5 substituents, heteroaryl optionally substituted with 1-3 substituents; R3 = (un) substituted C1-12 linear or branched alkyl, (un) substituted C3-12 cycloalkyl, aryl optionally substituted with 1-5 substituents, heteroaryl optionally substituted with 1-3 substituents; R4 = OH, OR5, (CH2) nOR5; wherein R5 = (un) substituted C1-7 alkyl; X = O, S] or tautomeric open chain keto-acids forms thereof or

pharmaceutically acceptable salt thereof are prepd. Also described are pharmaceutical compns. of the above compds., which are useful in treating elevated levels of endothelin, acute and chronic renal failure, hypertension, myocardial infarction, myocardial ischemia, cerebral vasospasm, cerebral ischemia, cerebral infarction, cirrhosis, septic shock, congestive heart failure, endotoxic shock, subarachnoid hemorrhage, arrhythmia, asthma, preeclampsia, atherosclerotic disorders including Raynaud's disease and restenosis, angina, cancer, pulmonary hypertension, ischemic disease, gastric mucosal damage, hemorrhagic shock, ischemic bowel disease, stroke, benign prostatic hyperplasia (BPH), and diabetes. Thus, Me 2-benzoyl-2-phenylacetate deriv. (II) and 3,4,5trimethoxybenzladehyde were refluxed in the presence of NaOMe in MeOH for 18 h and the soln. was treated with AcOH and refluxed an addnl. 72 h, followed by sapon. of the product with 1N aq. NaOH and acidification to give 28% I (X = O, R1 = Q, R2 = 3,4,5-trimethoxyphenyl, R3 = 4-methoxyphenyl, R4 = OH). The latter compd. in vitro showed an antagonism of endothelin I-stimulated vasoconstriction in the rabbit femoral artery and sarafotoxin 6c-stimulated vasoconstriction in the rabbit pulmonary artery with pA2 values of 0.00025 and 0.34, resp.

L5 ANSWER 10 OF 17 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1997:679056 CAPLUS

DOCUMENT NUMBER:

127:318875

TITLE:

Arylheterocyclic keto enols as pesticides and

herbicides

INVENTOR (S):

Lieb, Volker; Hagemann, Hermann; Widdig, Arno; Ruther,

Michael; Fischer, Reiner; Bretschneider, Thomas; Erdelen, Christoph; Wachendorff-Neumann, Ulrike;

Graff, Alan; Schneider, Udo

PATENT ASSIGNEE(S):

Bayer A.-G., Germany; Lieb, Volker; Hagemann, Hermann;

Widdig, Arno; Ruther, Michael; Fischer, Reiner;

Bretschneider, Thomas; Erdelen, Christoph;

Wachendorff-Neumann, Ulrike; et al.

SOURCE: PCT Int. Appl., 192 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT:

| | KIND DATE | | APPLICATION NO. | DATE |
|---------------|-----------------|-----|---------------------|-----------------|
| | | | WO 1997-EP1426 | 19970321 |
| | | | CZ, HU, IL, JP, KR, | |
| | RO, RU, SK, TR, | | | ,,, |
| RW: AT, BE, | CH, DE, DK, ES, | FI, | FR, GB, GR, IE, IT, | LU, MC, NL, PT, |
| | | | GA, GN, ML, MR, NE, | |
| DE 19649665 | Al 19971009 | | DE 1996-19649665 | 19961129 |
| | | | CA 1997-2250417 | |
| | | | AU 1997-22900 | 19970321 |
| AU 725852 | B2 20001019 | | | |
| | | | EP 1997-915409 | 19970321 |
| | | | IT, LI, NL, PT | |
| CN 1215390 | A 19990428 | | CN 1997-193592 | 19970321 |
| BR 9708425 | A 19990803 | | BR 1997-8425 | 19970321 |
| JP 2000507564 | T2 20000620 | | JP 1997-534875 | 19970321 |
| | | | KR 1998-7606 | |
| | | | KR 1998-707606 | |
| US 6140358 | A 20001031 | | US 1998-155637 | 19980929 |
| US 2001004629 | A1 20010621 | | US 2000-550105 | 20000414 |
| US 6271190 | B2 20010807 | | | |
| US 6388123 | | | US 2001-871611 | |
| US 6486343 | B1 20021126 | | US 2002-74351 | 20020212 |

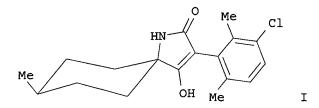
PRIORITY APPLN. INFO.: DE 1996-19613171 A 19960402

DE 1996-19649665 A 19961129 WO 1997-EP1426 W 19970321 US 1998-155637 A3 19980929 US 2000-550105 A3 20000414

US 2001-871611 A3 20010601

OTHER SOURCE(S): MARPAT 127:318875

GI



Title compds. were prepd. Thus, 3,2,6-Cl(Me)2C6H2CH2CO2H was treated with AB Me cis-1-amino-4-methylcyclohexanecarboxylate and cyclized with base to give the pyrrolinone I. At 0.1% I gave 100% control of Nephotettix cincticeps on rice.

ANSWER 11 OF 17 CAPLUS COPYRIGHT 2003 ACS

1997:276449 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 126:251066

TITLE: Preparation of furanones as endothelin antagonists

INVENTOR(S): Cheng, Xue-Min; Doherty, Annette Marian; Patt, William

Chester; Repine, Joseph Thomas

Warner-Lambert Company, USA; Cheng, Xue-Min; Doherty, PATENT ASSIGNEE(S):

Annette, Marian; Patt, William, Chester; Repine,

Joseph, Thomas

PCT Int. Appl., 46 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PA' | PATENT NO. KIND | | | | | | DATE APPLICATION NO. DATE | | | | | | | | | | | |
|----------|-----------------|-----|------|-----|-----|------|---------------------------|-----|-------|-------|--------------|-------|-----|------|------|-----|-----|----|
| | | | | | | | | | - | | - | | | | | | | |
| WO | 9708 | 169 | | A | 1 | 1997 | 0306 | | W | 19 | 96-U | S124 | 31 | 1996 | 0729 | | | |
| | W: | ΑU, | BG, | CA, | CN, | CZ, | EE, | GE, | HU, | IL, | JP, | KR, | LT, | LV, | MX, | NO, | NZ, | |
| | | | | | | SK, | | | | | | | | | | | | TM |
| | RW: | ΑT, | BE, | CH, | DE, | DK, | ES, | FI, | FR, | GB, | GR, | ΙE, | IT, | LU, | MC, | NL, | PT, | SE |
| AU | 9666 | | | | | 1997 | | | | | | | | 1996 | | | | |
| US | 5998 | 468 | | Α | | 1999 | 1207 | | U | 3 19 | 97-9 | 83554 | 4 | 1997 | 1215 | | | |
| PRIORITY | APP | LN. | INFO | . : | | | | , | US 1: | 995- | 2724 | P | P | 1995 | 0824 | | | |
| | | | | | | | | , | WO 1 | 996-1 | US12 | 431 | W | 1996 | 0729 | | | |

OTHER SOURCE(S): MARPAT 126:251066

GI

$$\begin{array}{c} \text{OMe} \\ \text{MeO} \\ \text{OMe} \\ \text{OMe$$

Novel nonpeptide antagonists of endothelin [I; R1 = (un)substituted C3-12 AB cycloalkyl, Ph, naphthyl, heteroaryl; R2 = (un)substituted C1-12 alkyl, C3-12 cycloalkyl; R3 = (un)substituted C1-12 alkyl, C3-12 cycloalkyl, etc.; R4 = OH, O(C1-7 alkyl), SH, etc.; X = O, S], useful in treating elevated levels of endothelin, acute and chronic renal failure, hypertension, myocardial infarction, myocardial ischemia, cerebral vasospasm, cerebral ischemia, cerebral infarction, cirrhosis, septic shock, congestive heart failure, endotoxic shock, subarachnoid hemorrhage, arrhythmias, asthma, preeclampsia, atherosclerotic disorders including Raynaud's disease and restenosis, angina, cancer, pulmonary hypertension, ischemic disease, gastric mucosal damage, hemorrhagic shock, ischemic bowel disease, stroke, benign prostatic hyperplasia (BPH), and diabetes, were prepd. Thus, treatment of 3-(benzo[1,3]dioxol-5-yl)-5-hydroxy-5-(4methoxyphenyl)-4-(3,4,5-trimethoxybenzyl)-5H-furan-2-one with CF3COOH followed by addn. Et3SiH afforded II which showed IC50 of 30 nM against endothelin receptor ETA (ERBA-A) and of > 2500 nM against ETB (ERBA-B).

ANSWER 12 OF 17 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

1997:151521 CAPLUS

DOCUMENT NUMBER:

126:157396

TITLE:

Preparation of 3-phenylheterocycloalkyl-2,4-dione

enols as pesticides and herbicides

INVENTOR(S):

Lieb, Folker; Hagemann, Hermann; Widdig, Arno; Ruther,

Michael; Fischer, Reiner; Bretschneider, Thomas; Erdelen, Christoph; Wachendorff-Neumann, Ulrike;

Dahmen, Peter; Dollinger, Markus; Santel, Hans-Joachim; Graff, Alan; Andersch, Wolfram

PATENT ASSIGNEE(S):

SOURCE:

Bayer A.-G., Germany Ger. Offen., 135 pp.

CODEN: GWXXBX

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT:

| PATENT NO. | KIND DATE | APPLICATION NO. DATE |
|-------------|-----------------|---|
| | · | |
| DE 19603332 | A1 19970102 | DE 1996-19603332 19960131 |
| CA 2225830 | AA 19970123 | 3 CA 1996-2225830 19960617 |
| WO 9702243 | A1 19970123 | WO 1996-EP2601 19960617 |
| W: AU, BB, | BG, BR, BY, CA, | , CN, CZ, HU, JP, KR, KZ, LK, MX, NO, NZ, |
| PL, RO, | RU, SK, TR, UA, | , US |
| RW: AT, BE, | CH, DE, DK, ES, | , FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, |
| SE, BF, | BJ, CF, CG, CI, | , CM, GA, GN, ML, MR, NE, SN, TD, TG |
| AU 9663561 | A1 19970205 | 5 AU 1996-63561 19960617 |
| AU 707357 | B2 19990708 | 3 |

| EP 835243 | A1 | 19980415 | | EP 1996-922817 | 19960617 |
|------------------------|-----------|-----------|--------|------------------|------------|
| R: BE, CH, D | E, DK, | ES, FR, | GB, GF | R, IT, LI, NL | |
| CN 1193960 | Α | 19980923 | | CN 1996-196456 | 19960617 |
| BR 9609301 | A | 19990525 | | BR 1996-9301 | 19960617 |
| JP 11510481 | T2 | 19990914 | | JP 1996-504750 | 19960617 |
| TW 410141 | В | 20001101 | | TW 1996-85107798 | 3 19960628 |
| US 5994274 | Α | 19991130 | | US 1997-981610 | 19971223 |
| US 6251830 | B1 | 20010626 | | US 1999-360510 | 19990726 |
| US 2002022575 | A1 | 20020221 | | US 2001-839481 | 20010420 |
| US 6469196 | B2 | 20021022 | | | |
| CN 1362397 | Α | 20020807 | | CN 2001-138493 | 20011114 |
| PRIORITY APPLN. INFO.: | | | DE | 1995-19523850 A | L 19950630 |
| | | | DE | 1996-19603332 A | 19960131 |
| | | | WO | 1996-EP2601 W | 19960617 |
| | | | US | 1997-981610 A | 3 19971223 |
| | | | US | 1999-360510 A3 | 3 19990726 |
| OTHER SOURCE(S) . | MAT | PAT 126.1 | 57396 | | |

OTHER SOURCE(S):

MARPAT 126:157396

GI

AB Title compds. [I; R = 4-(O-acyl)hydroxy-2-oxo-3-pyrrolin-2-yl, -2,5-dihydro-3-furyl, -2,5-dihydro-3-thienyl, etc.; R1 = alkyl; R2,R3 = halo or alkyl] were prepd. Thus, 4,2,6-BrMe2C6H2CH2CO2H was amidated by Me 1-amino-3-methylcyclohexanecarboxylate and the product cyclized to give title compd. II. Data for biol. activity of I were given.

ANSWER 13 OF 17 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

1997:41800 CAPLUS

DOCUMENT NUMBER:

126:74741

TITLE:

Alkyl dihalogenated phenyl-substituted keto enols

useful as pesticides and herbicides

INVENTOR(S):

Lieb, Folker; Hagemann, Hermann; Widdig, Arno; Ruther,

Michael; Fischer, Reiner; Bretschneider, Thomas; Erdelen, Christoph; Wachendorff-Neumann, Ulrike;

Dahmen, Peter; Dollinger, Markus; Santel,

Hans-Joachim; et al.

PATENT ASSIGNEE(S):

Bayer A.-G., Germany; Lieb, Folker; Hagemann, Hermann;

Widdig, Arno; Ruther, Michael; Fischer, Reiner;

Bretschneider, Thomas; Erdelen, Christoph;

Wachendorff-Neumann, Ulrike; et al.

PCT Int. Appl., 231 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

SOURCE:

German

FAMILY ACC. NUM. COUNT:

| PATENT | PATENT NO. KIND | | | | | | | A | PPLI | CATI | ON NO | ο. | DATE | | | |
|--------|-----------------|----------|-----|-----|--------------|------|-----|-----|-------|------|-------|-----|------|------------|-----|-----|
| | | - | | | - | | | - | | | | | | - - | | |
| WO 963 | 5664 | | A | 1 | 1996 | 1114 | | W | 0 19: | 96-E | P178 | 1 | 1996 | 0429 | | |
| ₩: | AU, | BB, | BG, | BR, | BY, | CA, | CN, | CZ, | HU, | JP, | KR, | ΚZ, | LK, | MX, | NO, | ΝZ, |
| | PL, | RO, | RU, | SK, | TR, | UA, | US | | | | | | | | | |
| RW | : AT, | BE, | CH, | DE, | DK, | ES, | FI, | FR, | GB, | GR, | ΙE, | IT, | LU, | MC, | NL, | PT, |

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OTHER SOURCE(S):

MARPAT 126:74741

GI

Het
$$Q^{1}$$
 Q^{1} Q^{2} Q^{2}

AB Title compds. I [X = halo, Y, Z = halo or alkyl, provided that 1 of Y and Z always = halo, and the other = alkyl; Het = 1 of the heterocyclic groups Q1-Q6; A = H, (halo)alkyl, alkenyl, alkoxyalkyl, (un)substituted cycloalkyl or heterocyclyl, etc.; B = H, alkyl, alkoxyalkyl; D = H, (un)substituted alk(en/yn)yl, alkoxyalkyl, cycloalkyl, aralkyl, heterocyclyl, aryl, etc.; A and B, or A and D, may form (un)substituted carbo- or heterocyclic rings; G = various acyl, sulfonyl, or phosphoryl substituents, or metal or ammonium ions] are prepd. Also disclosed are several processes for prepg. the compds., and their use as pesticides and herbicides. For example, amidation of 2,4-dichloro-6-methylphenylacetic acid with H2NC(Me)(i-Pr)CN via the acid chloride using SOCl2 (81%), followed by alcoholysis of the nitrile using H2SO4 and MeOH quench (73%),

and cyclization of the resultant ester with KOBu-tert in THF (73%), gave title compd. II. In a test against Myzus persicae at 0.1%, II gave 100% kill in 6 days. At 250 g/ha preemergence, selected I gave 80-100% kill of 4 weeds with 0-50% damage to Beta vulgaris.

ANSWER 14 OF 17 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1996:577745 CAPLUS

DOCUMENT NUMBER: 125:221568

Preparation of 3-phenyl-2,4-dioxopyrrolidine tautomers TITLE:

and analogs as herbicides and pesticides

Fischer, Reiner; Bretschneider, Thomas; Hagemann, INVENTOR(S):

Hermann; Lieb, Folker; Lui, Norbert; Ruther, Michael; Widdig, Arno; Erdelen, Christoph; Wachendorff-Neumann,

Ulrike; et al.

PATENT ASSIGNEE(S):

Bayer A.-G., Germany Ger. Offen., 94 pp. SOURCE:

CODEN: GWXXBX

DOCUMENT TYPE:

Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PA' | TENT 1 | NO. | | | | DATE | | | A) | PPLI | CATI | ON NO | ο. | DATE | | | |
|---------|--------|-------|-------|-----|-----|------|------|-----|-------|-------|---------------|-------------|-----------|------|------|-----|-----|
| | | | | | | | | | | | - | - - | | | | | |
| | 1954 | | | | | | | | | | | | | | | | |
| WO | 9625 | 395 | | A: | 1 | 1996 | 0822 | | W | 19: | 96-E | P382 | | 1996 | 0131 | | |
| | W: | ΑU, | BB, | BG, | BR, | BY, | CA, | CN, | CZ, | FI, | HU, | JP, | KR, | KZ, | LK, | MX, | NO, |
| | | ΝZ, | PL, | RO, | RU, | SK, | UA, | US | | | | | | | | | |
| | RW: | ΑT, | ΒE, | CH, | DE, | DK, | ES, | FR, | GB, | GR, | ΙE, | IT, | LU, | MC, | NL, | PT, | SE, |
| | | BF, | ВJ, | CF, | CG, | CI, | CM, | GΑ, | GN, | ML, | MR, | ΝE, | SN, | TD, | TG | | |
| AU | 9647 | 158 | | A: | 1 | 1996 | 904 | | ΙA | J 19 | 96-4 | 7158 | | 1996 | 0131 | | |
| BR | 9606 | 956 | | A | | 1997 | 1028 | | BI | R 19 | 96-6 | 956 | | 1996 | 0131 | | |
| EP | 8096 | 29 | | A. | 1 | 1997 | 1203 | | EI | 2 19: | 96-9 | 0295 | 1 | 1996 | 0131 | | |
| | R: | ΒE, | CH, | DE, | ES, | FR, | GB, | IT, | LI, | NL | | | | | | | |
| CN | 1173 | 366 | | Α | | 1998 | 218 | | Cl | 1 19: | 96-1 | 9190 | 7 | 1996 | 0131 | | |
| JP | 1150 | 0114 | | T | 2 | 1999 | 0106 | | JI | 19 | 96-5 | 24608 | 3 | 1996 | 0131 | | |
| ZA | 9601 | 107 | | Α | | 1996 | 0828 | | ZI | A 19 | 96-1 | 107 | | 1996 | 0212 | | |
| US | 63588 | 387 | | B: | 1 | 2002 | 319 | | US | 3 19: | 97-8 | 75872 | 2 | 1997 | 0805 | | |
| PRIORIT | Y APPI | LN.] | INFO. | . : | | | | I | DE 19 | 95-3 | 1950 | 4621 | A1 | 1995 | 0213 | | |
| | | | | | | | | Ι | DE 19 | 95-3 | 1954 | 3864 | Α | 1995 | 1124 | | |
| | | | | | | | | V | VO 19 | 996-1 | EP38: | 2 | W | 1996 | 0131 | | |

OTHER SOURCE(S): MARPAT 125:221568

GI

AΒ Title compds. [I; R = oxopyrrolinyl group Q; R1 = halo, alkyl, alkoxy, Ph, etc.; R2,R3 = H, halo, alkyl, alkoxy, etc.; R4 = H, alkanoyl, alkoxycarbonyl, etc.; R5 = H, alkyl, (hetero)aryl, etc.; R6 = H, (alkoxy)alkyl; R5R6 = atoms to form a ring; R7 = H, alkyl, (hetero)aryl, etc.; R6R7 = atoms to form a ring] were prepd. Thus, 2,4-Cl(MeO2S)C6H3Me was converted in 3 steps to 2,4-Cl (MeO2S) C6H3CH2CO2H which was amidated by Me 1-amino-4-methylcyclohexanecarboxylate and the product cyclized to give title compd. II. The latter gave complete control of Nephotettix cinciteps on rice seedlings at 0.1%.

ANSWER 15 OF 17 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

1995:994551 CAPLUS

DOCUMENT NUMBER:

124:29593

TITLE:

Preparation of 3-aryl-4-hydroxy-.DELTA.3-

dihydrothiophenone pesticides

INVENTOR(S):

Fischer, Reiner; Dumas, Jacques; Bretschneider, Thomas; Erdelen, Chrostoph; Wachendorff-Neumann,

Ulrike

PATENT ASSIGNEE(S):

Bayer A.-G., Germany

SOURCE:

Ger. Offen., 94 pp.

CODEN: GWXXBX

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT:

| PATENT NO. | KIND DATE | APPLICATION NO. DATE |
|-------------|-------------------|--|
| | | |
| | | DE 1994-4410420 19940325 |
| WO 9526345 | A1 19951005 | WO 1995-EP953 19950314 |
| | | N, CZ, FI, HU, JP, KR, KZ, LK, MX, NO, |
| NZ, PL, | RO, RU, SK, UA, U | JS |
| RW: AT, BE, | CH, DE, DK, ES, F | R, GB, GR, IE, IT, LU, MC, NL, PT, SE, |
| BF, BJ, | CF, CG, CI, CM, G | SA, GN, ML, MR, NE, SN, TD, TG |
| | | AU 1995-20707 19950314 |
| EP 751942 | A1 19970108 | EP 1995-913114 19950314 |
| EP 751942 | B1 20000531 | |
| R: BE, CH, | DE, ES, FR, GB, I | T, LI, NL |
| BR 9507179 | A 19971007 | BR 1995-7179 19950314 |
| JP 09511241 | T2 19971111 | JP 1995-524930 19950314 |
| ES 2148503 | T3 20001016 | ES 1995-913114 19950314 |
| ZA 9502413 | A 19951218 | ZA 1995-2413 19950324 |

19990831 US 1996-716361 19960918 US 5945444 Α PRIORITY APPLN. INFO.: DE 1994-4410420 A 19940325 WO 1995-EP953 W 19950314

OTHER SOURCE(S): MARPAT 124:29593

GT

AB The title compds. [I; A, B = (un)substituted alkyl, alkenyl, alkynyl, (un) substituted cycloalkyl, etc; G = H, (un) substituted carbonyl or sulfonyl residue, etc.; X = alkyl, halogen, alkoxy, alkoxy, haloalkyl; Y = H, X; Z = alkyl, halogen, alkoxy; n = 0-3; AB = alkylene, etc; XZ = 1(un) substituted benzo], useful as pesticides, are prepd. Thus, dihydrothiophenone II, m.p. 199.degree., was prepd. and demonstrated 100% control of Nephotettrix cincticeps-infested Oryza sativa at 0.1% after 6 days.

ANSWER 16 OF 17 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1993:517088 CAPLUS

DOCUMENT NUMBER:

119:117088

Preparation and insecticidal, acaricidal, herbicidal, and fungicidal activities of 3-aryl-4-hydroxy-.DELTA.3-TITLE:

dihydrofuranone and -thiophenone derivatives

INVENTOR(S): Fischer, Reiner; Bretschneider, Thomas; Krueger, Bernd

Wieland; Bachmann, Juergen; Erdelen, Christoph; Wachendorff-Neumann, Ulrike; Santel, Hans Joachim;

Luerssen, Klaus; Schmidt, Robert R.

Bayer A.-G., Germany

PATENT ASSIGNEE(S):

SOURCE: Ger. Offen., 96 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--------|-----------------|-----------------|----------|
| | | | | |
| DE 4216814 | A1 | 19930121 | DE 1992-4216814 | 19920521 |
| EP 528156 | A1 | 19930224 | EP 1992-111324 | 19920703 |
| EP 528156 | B1 | 19970326 | | |
| R: BE, CH, I | DE, ES | , FR, GB, GR, I | T, LI, NL, PT | |
| ES 2099770 | Т3 | 19970601 | ES 1992-111324 | 19920703 |
| US 5262383 | A | 19931116 | US 1992-909939 | 19920707 |
| AU 9219599 | A1 | 19930121 | AU 1992-19599 | 19920710 |
| AU 645701 | B2 | 19940120 | | |
| JP 05294953 | A2 | 19931109 | JP 1992-206261 | 19920710 |
| JP 3113078 | B2 | 20001127 | | |
| BR 9202653 | Α | 19930316 | BR 1992-2653 | 19920713 |
| ZA 9205260 | A | 19930428 | ZA 1992-5260 | 19920715 |
| PRIORITY APPLN. INFO.: | | DE | 1991-4123532 A1 | 19910716 |
| | | DE | 1992-4216814 A | 19920521 |
| OTHER SOURCE (c). | MAT | DAT 110.117000 | | |

OTHER SOURCE(S): MARPAT 119:117088

GT

The prepn. of title compds. I, (X = alkyl, halo, alkoxy, haloalkyl; Y = H, AB alkyl, halo, alkoxy, haloalkyl; Z = alkyl, halo, alkoxy, n = 0-3; G = H, acyl, alkenylalkyl, organosulfonyl, organophosphonyl, diorganoaminoalkenylalkyl; A, B = H, halo substituted alkyl, alkenyl, alkynyl, alkoxyalkyl, alkylthioalkyl, cycloalkyl, etc.; D = O, S), as insecticide, acaricide, herbicide, and fungicide is claimed. Thus, KOCMe3 mediated cyclization of methoxycarbonylmethyl 2,4,6-trimethylphenylacetate in Me3COH gave furanone deriv. II.

ANSWER 17 OF 17 CAPLUS COPYRIGHT 2003 ACS

1992:59208 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER:

116:59208

TITLE:

Preparation of 4-(heterocyclylmethyl)-2-furanones, -pyrrolidinones, and -thiophenones as psychoanaleptics

INVENTOR(S): Hobbs, Sheila H.

PATENT ASSIGNEE(S):

Warner-Lambert Co., USA

SOURCE:

U.S., 9 pp. CODEN: USXXAM

DOCUMENT TYPE:

Patent

English

LANGUAGE: FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-----------------------|------|----------------|-----------------|----------|
| | | | | |
| US 5066663 | Α | 19911119 | US 1990-526361 | 19900521 |
| PRIORITY APPLN. INFO. | : | US | 1990-526361 | 19900521 |
| OTHER SOURCE(S): | MA | RPAT 116:59208 | | |

GΙ

$$R^3$$
 CH_2R

AB Title compds. (I; R = heterocyclyl; R1-R3 = H, alkyl, alkynyl, aryl; R1R2 = bond; X = O, S, NR4; R4 = H, alkyl) were prepd. as muscarinic agonists (no data), useful for the treatment of cognitive decline. Prepn. of 3-ethyldihydro-4-(3-pyridazinylmethyl)-2(3H)-furanone by condensation of 3-methylpyridazine with 3-ethyl-2(5H)-furanone (prepn. from .gamma.-butyrolactone given) was described.

(FILE 'HOME' ENTERED AT 17:11:06 ON 09 FEB 2003)

FILE 'REGISTRY' ENTERED AT 17:11:16 ON 09 FEB 2003

STRUCTURE UPLOADED L1

0 S L1 L2

1 S L1 FUL L3

FILE 'MARPAT' ENTERED AT 17:12:51 ON 09 FEB 2003

17 S L3 FUL L4

FILE 'CAPLUS' ENTERED AT 17:13:19 ON 09 FEB 2003

17 S L4 L_5

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FULL ESTIMATED COST 41.47 244.68

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL

SESSION ENTRY CA SUBSCRIBER PRICE -11.07 -11.07

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